WHAT IS CLAIMED IS:

1. An assembly for the rotational mounting of a rotary anode of an X-ray emitting device on a support comprising:

at least one rolling bearing to be placed between the rotary anode and the support , the rolling bearing comprising a rotating ring, a non-rotating ring, and rolling elements placed between raceways of the first ring and of the second ring; and

at least one sleeve intended to be mounted between an axially stressed ring of the rolling bearing and a cylindrical bearing surface of the anode or of the support, the sleeve being radially elastic in order to compensate for variations in radial dimensions between the ring and the cylindrical bearing surface, and in order to dampen the vibration, while at the same time being suitable for allowing the ring to slide axially with respect to the cylindrical bearing surface.

2. The assembly according to claim 1 wherein the sleeve comprises a substantially cylindrical wall having, on one side, circumferentially spaced longitudinal ribs, and corresponding grooves on the opposite side.

3. The assembly according to claim 2 wherein the ribs project radially inwards.

4. The assembly according to claim 2 wherein the ribs project radially outwards.

5. The assembly according to claim 2 wherein the wall has a corrugated surface forming ribs on each side of a central cylindrical generatrix.

6. The assembly according to claim 2 wherein the ribs have been produced by deformation of the cylindrical wall.

7. The assembly according to claim 3 wherein the ribs have been produced by deformation of the cylindrical wall.

8. The assembly according to claim 4 wherein the ribs have been produced by deformation of the cylindrical wall.

9. The assembly according to claim 5 wherein the ribs have been produced by deformation of the cylindrical wall.

10. The assembly according to claim 2 wherein the ribs are regularly spaced circumferentially.

11. The assembly according to claim 3 wherein the ribs are regularly spaced circumferentially.

12. The assembly according to claim 4 wherein the ribs are regularly spaced circumferentially.

13. The assembly according to claim 5 wherein the ribs are regularly spaced circumferentially.

14. The assembly according to claim 6 wherein the ribs are regularly spaced circumferentially.

15. The assembly according to claim 2 wherein the sleeve comprises a number N of ribs, the number N being a multiple of four.

16. The assembly according to claim 3 wherein the sleeve comprises a number N of ribs, the number N being a multiple of four.

17. The assembly according to claim 4 wherein the sleeve comprises a number N of ribs, the number N being a multiple of four.

18. The assembly according to claims 5 wherein the sleeve comprises a number N of ribs, the number N being a multiple of four.

19. The assembly according to claim 6 wherein the sleeve comprises a number N of ribs, the number N being a multiple of four.

20. The assembly according to claim 7 wherein the sleeve comprises a number N of ribs, the number N being a multiple of four.

21. The assembly according to claim 1 wherein the sleeve comprises a longitudinal slot extending from one end of the sleeve to the other.

22. The assembly according to claim 1 wherein the sleeve is made of metal.

23. The assembly according to claim 1 wherein the sleeve is provided on an internal and/or external face with a coating in order to improve the sliding of a metal part in contact with the sleeve.

24. The assembly according to claim 1 comprising:

a first roller bearing;

a second rolling bearing to be placed between the support and the rotary anode; and

an axially prestressed elastic element between the first and second rolling bearings in order to exert an axial force separating the rolling bearings.

25. The assembly according to claim 24 wherein the rolling bearings are in oblique contact.

26. X-ray emitting device comprising:

a cathode;

a rotary anode;

the rotary anode being mounted so that it can rotate on a support by means of a bearing assembly;

the bearing assembly comprising:

at least one rolling bearing provided to be placed between the rotary anode and the support, the rolling bearing comprising a rotating ring, a non-rotating ring, and rolling elements placed between raceways of the first ring and of the second ring; and

at least one sleeve intended to be mounted between an axially stressed ring of the rolling bearing and a cylindrical bearing surface of the anode or of the support, the sleeve being radially elastic, while at the same time being suitable for allowing the ring to slide axially with respect to the cylindrical bearing surface.

27. The device according to claim 26 wherein the sleeve comprises a substantially cylindrical wall having, on one side, circumferentially spaced longitudinal ribs, and corresponding grooves on the opposite side.

28. The device according to claim 27 wherein the ribs project radially inwards.

29. The device according to claim 27 wherein the ribs project radially outwards.

30. The device according to claim 27 wherein the wall of the sleeve has a corrugated surface forming ribs on each side of a central cylindrical generatrix.

31. The device according to claim 27 wherein the ribs have been produced by deformation of the cylindrical wall of the sleeve.

32. The device according to claim 28 wherein the ribs have been produced by deformation of the cylindrical wall of the sleeve.

33. The device according to claim 29 wherein the ribs have been produced by deformation of the cylindrical wall of the sleeve.

34. The device according to claim 30 wherein the ribs have been produced by deformation of the cylindrical wall of the sleeve.

35. The device according to claim 27 wherein the ribs are regularly spaced circumferentially.

36. The device according to claim 28 wherein the ribs are regularly spaced circumferentially.

37. The device according to claim 29 wherein the ribs are regularly spaced circumferentially.

38. The device according to claim 30 wherein the ribs are regularly spaced circumferentially.

39. The device according to claim 31 wherein the ribs are regularly spaced circumferentially.

40. The device according to claim 26 wherein the sleeve is made of metal.

41. The device according to claim 27 wherein the sleeve is made of metal.

42. The device according to claim 28 wherein the sleeve is made of metal.

43. The device according to claim 29 wherein the sleeve is made of metal.

44. The device according to.claim 30 wherein the sleeve is made of metal.

45. The device according to claim 31 wherein the sleeve is made of metal.

46. The device according to claim 35 wherein the sleeve is made of metal.

47. The device according to claim 26 wherein the sleeve is provided on an internal and/or external face with a coating in order to improve the sliding of a metal part in contact with the sleeve.

48. The device according to claim 27 wherein the sleeve is provided on an internal and/or external face with a coating in order to improve the sliding of a metal part in contact with the sleeve.

49. The device according to claim 28 wherein the sleeve is provided on an internal and/or external face with a coating in order to improve the sliding of a metal part in contact with the sleeve.

50. The device according to claim 29 wherein the sleeve is provided on an internal and/or external face with a coating in order to improve the sliding of a metal part in contact with the sleeve.

51. The device according to claim 30 wherein the sleeve is provided on an internal and/or external face with a coating in order to improve the sliding of a metal part in contact with the sleeve.

52. The device according to claim 31 wherein the sleeve is provided on an internal and/or external face with a coating in order to improve the sliding of a metal part in contact with the sleeve.

53. The device according to claim 35 wherein the sleeve is provided on an internal and/or external face with a coating in order to improve the sliding of a metal part in contact with the sleeve.

54. The device according to claim 40 wherein the sleeve is provided on an internal and/or external face with a coating in order to improve the sliding of a metal part in contact with the sleeve.

55. The device according to claim 26 wherein the sleeve comprises a longitudinal slot extending from one end of the sleeve to the other.

56. The device according to claim 27 wherein the sleeve comprises a longitudinal slot extending from one end of the sleeve to the other.

57. The device according to claim 28 wherein the sleeve comprises a longitudinal slot extending from one end of the sleeve to the other.

58. The device according to claim 29 wherein the sleeve comprises a longitudinal slot extending from one end of the sleeve to the other.

59. The device according to claim 30 wherein the sleeve comprises a longitudinal slot extending from one end of the sleeve to the other.

60. The device according to claim 31 wherein the sleeve comprises a longitudinal slot extending from one end of the sleeve to the other.

61. The device according to claim 35 wherein the sleeve comprises a longitudinal slot extending from one end of the sleeve to the other.

62. The device according to claim 40 wherein the sleeve comprises a longitudinal slot extending from one end of the sleeve to the other.

63. The device according to claim 47 wherein the sleeve comprises a longitudinal slot extending from one end of the sleeve to the other.

64. The device according to claim 26 comprising:
a first rolling bearing;
a second rolling bearing placed between the support and the rotary anode; and
an axially prestressed elastic element between the first and second rolling bearings.

65. The device according to claim 27 comprising:
a first rolling bearing;
a second rolling bearing placed between the support and the rotary anode; and
an axially prestressed elastic element between the first and second rolling bearings.

66. The device according to claim 28 comprising:
a first rolling bearing;
a second rolling bearing placed between the support and the rotary anode; and
an axially prestressed elastic element between the first and second rolling bearings.

67. The device according to claim 29 comprising:
a first rolling bearing;
a second rolling bearing placed between the support and the rotary anode; and
an axially prestressed elastic element between the first and second rolling bearings.

68. The device according to claim 30 comprising:
a first rolling bearing;
a second rolling bearing placed between the support and the rotary anode; and
an axially prestressed elastic element between the first and second rolling bearings.

69. The device according to claim 31 comprising:
a first rolling bearing;
a second rolling bearing placed between the support and the rotary anode; and
an axially prestressed elastic element between the first and second rolling bearings.

70. The device according to claim 35 comprising:
a first rolling bearing;
a second rolling bearing placed between the support and the rotary anode; and
an axially prestressed elastic element between the first and second rolling bearings.

71. The device according to claim 40 comprising:
a first rolling bearing;
a second rolling bearing placed between the support and the rotary anode; and
an axially prestressed elastic element between the first and second rolling bearings.

72. The device according to claim 47 comprising:
a first rolling bearing;
a second rolling bearing placed between the support and the rotary anode; and
an axially prestressed elastic element between the first and second rolling bearings.

73. The device according to claim 55 comprising:

a first rolling bearing;

a second rolling bearing placed between the support and the rotary anode; and

an axially prestressed elastic element between the first and second rolling bearings.

74. The device according to claim 24 wherein the rolling bearings are in oblique contact.

75. A radiological apparatus comprising:

means for emitting radiation;

means for receiving the emitted radiation;

the means for emitting radiation comprising:

a cathode;

a rotary anode;

the rotary anode being mounted so that it can rotate on a support by means of a bearing assembly;

the bearing assembly comprising:

at least one rolling bearing to be placed between the rotary anode and the support, the rolling bearing comprising a rotating ring, a non-rotating ring, and rolling elements placed between raceways of the first ring and of the second ring; and

at least one sleeve intended to be mounted between an axially stressed ring of the rolling bearing and a cylindrical bearing surface of the anode or of the support, the sleeve being radially elastic, while at the same time being suitable for allowing the ring to slide axially with respect to the cylindrical bearing surface.